

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/844,432	04/30/2001	Aaron W. Buchwald	1875.0560001	9072	
26111 75	26111 7590 04/21/2005			EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W.			PERILLA, JASON M		
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER	
			2634		
			DATE MAILED: 04/21/2005	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Commence	09/844,432	BUCHWALD ET AL.	$(\bar{\mathscr{Q}}$
Office Action Summary	Examiner	Art Unit	
	Jason M Perilla	2634	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).	·
Status			
1) Responsive to communication(s) filed on 09 No	ovember 2004.	*	
· ·	action is non-final.		
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the merits is	
closed in accordance with the practice under E			
Disposition of Claims			
4) Claim(s) 1-5 and 8-28 is/are pending in the app	olication.		
4a) Of the above claim(s) is/are withdraw			
5) Claim(s) is/are allowed.			
6)☐ Claim(s) is/are rejected.			
7) Claim(s) 3,4,8-11,14-17,19,20 and 24 is/are ob	jected to.		
8) Claim(s) are subject to restriction and/or	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10)⊠ The drawing(s) filed on 09 November 2004 is/a	re: a)⊠ accepted or b)□ object	ed to by the Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d)).
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).	
 Certified copies of the priority documents 	s have been received.		
2. Certified copies of the priority documents	* *		
3. Copies of the certified copies of the prior	·	ed in this National Stage	
application from the International Bureau			
* See the attached detailed Office action for a list	of the certified copies not receive	ed.	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	Patent Application (PTO-152)	
S Patent and Trademark Office			

Application/Control Number: 09/844,432 Page 2

Art Unit: 2634

DETAILED ACTION

1. Claims 1-5, and 8-28 are pending in the instant application.

Drawings

The replacement drawing sheets of figures 9 and 10 were received on November
 2004. These drawings are accepted by the Examiner.

Response to Arguments/Amendments

- 3. The rejections of the claims set forth in the office action dated July 14, 2004 have been withdrawn in view of the amendments to the claims and the remarks filed November 9, 2004 as well as in view of the in person interview on November 8, 2004.
- 4. This office action is in response to the Amendment filed November 9, 2004.

Claim Objections

5. Claims 3, 4, 8-11, 14-17, 19, 20, and 24 are objected to because of the following informalities:

Regarding claim 3, in line 4, "at the rate" should be replaced by -at a rate--.

Regarding claim 8, in line 1, "a plurality" should be replaced by -the plurality--.

Regarding claim 10, in line 6, "at the rate" should be replaced by -at the rate--.

Regarding claim 14, in line 3, "at the rate" should be replaced by –at the rate--.

Regarding claim 16, in line 2, "deriving the data" should be replaced by –deriving the interpolated phase of the data—and "and phase" should be replaced by –and the phase--, and, in line 3, "signal phase responsive" should be replaced by –signal responsive--.

Regarding claim 19, in line 4, "the plurality" should be replaced by -a plurality--.

Regarding claim 20, in line 2, "a frequency" should be replaced by –the frequency—in both instances.

Regarding claim 24, the claim should depend upon claim 23 rather than claim 30.

Appropriate correction is required.

Allowable Subject Matter

- 6. Claims 1-5 and 8-28 are indicated to contain allowable subject matter.
- 7. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-5 and 8-28 are indicated to contain allowable subject matter because the prior art of record does not anticipate or obviate all the limitations in the independent claims 1 and 12. With the amendment of November 9, 2004, the prior art reference Evans et al (US 6002279) no longer anticipates the claimed limitations. Specifically, Evans et al does not disclose a phase interpolator which derives a data sampling signal to be placed upon a data path and a phase sampling signal to be placed upon a phase path.

Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art of record not relied upon above is cited to further show the state of the art with respect to the recovery of timing information.
 - U.S. Pat. No. 5581585 to Takatori et al.
- 9. This application is in condition for allowance except for the following formal matters:

Application/Control Number: 09/844,432

Art Unit: 2634

The objections above.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Perilla April 14, 2005

Page 4

STEPHEN CHIN

SUPERVISORY PATENT EXAMINE TECHNOLOGY CENTER 2600

jmp